

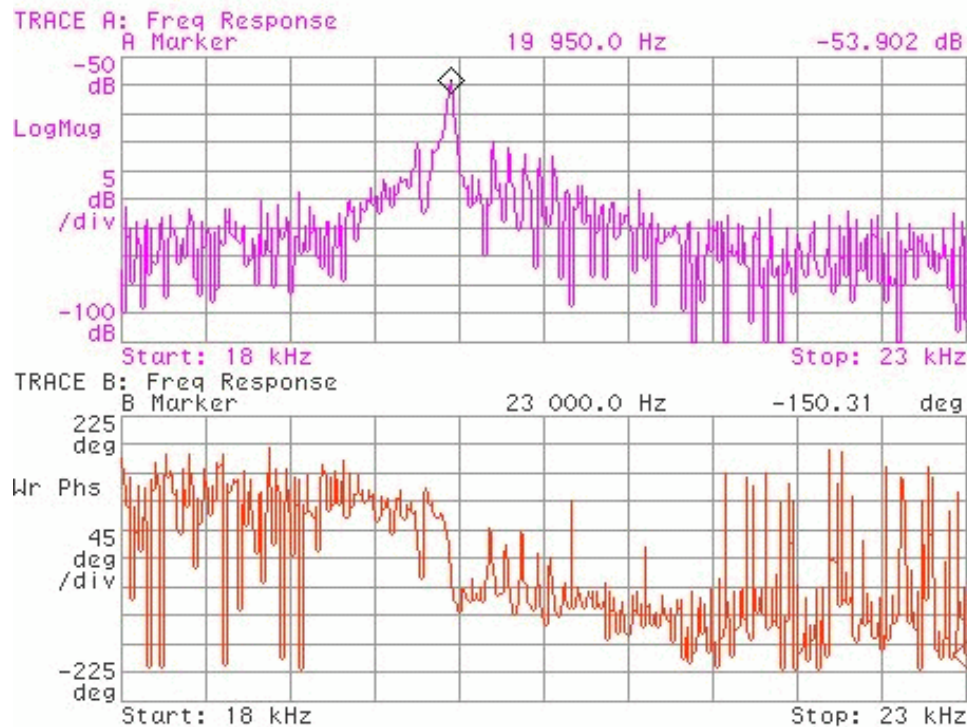
# Tune Meter

C.Y. Tan  
14 Jan 04

# Pbar Bunch 2 at 150GeV

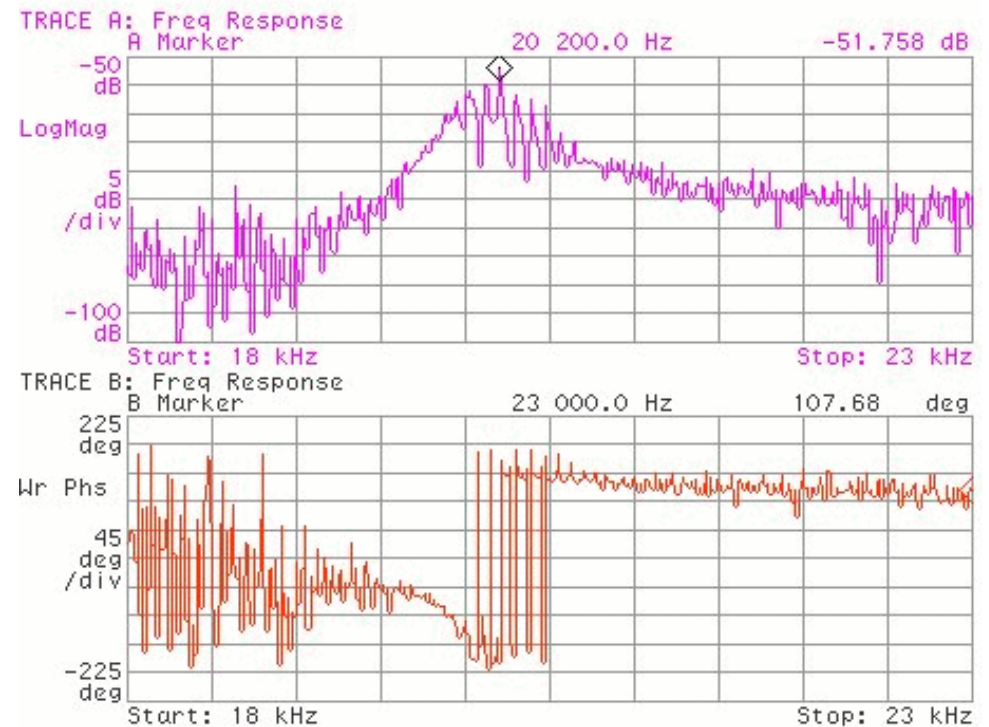
## Horizontal

Date: 08-03-00 Time: 01:05 PM



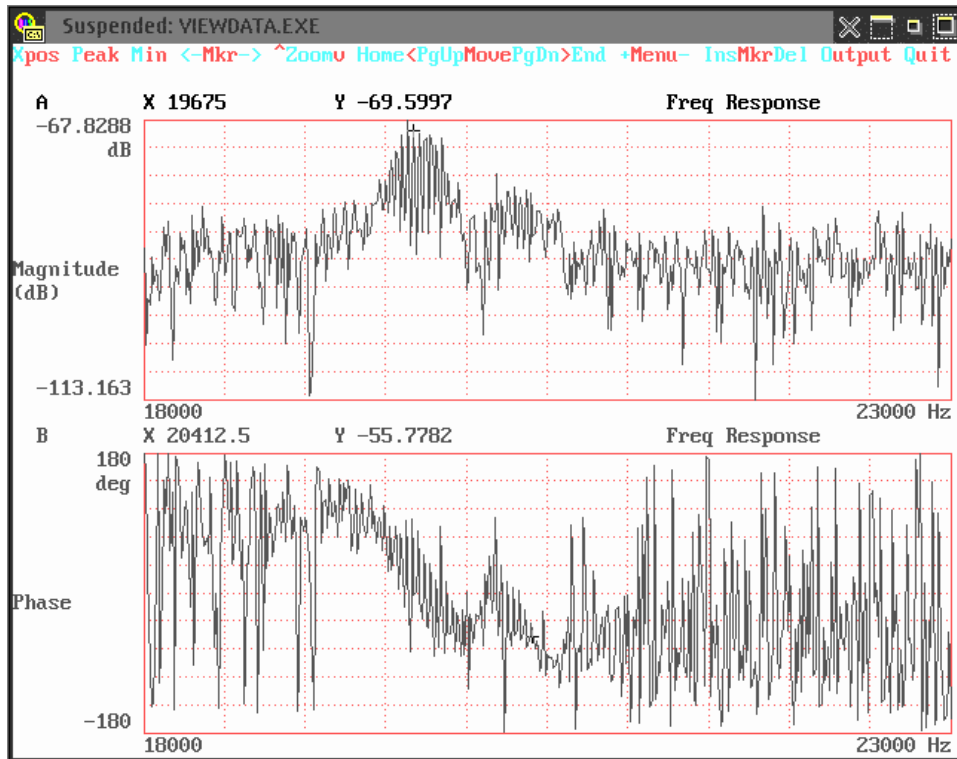
## Vertical

Date: 08-03-00 Time: 12:56 PM



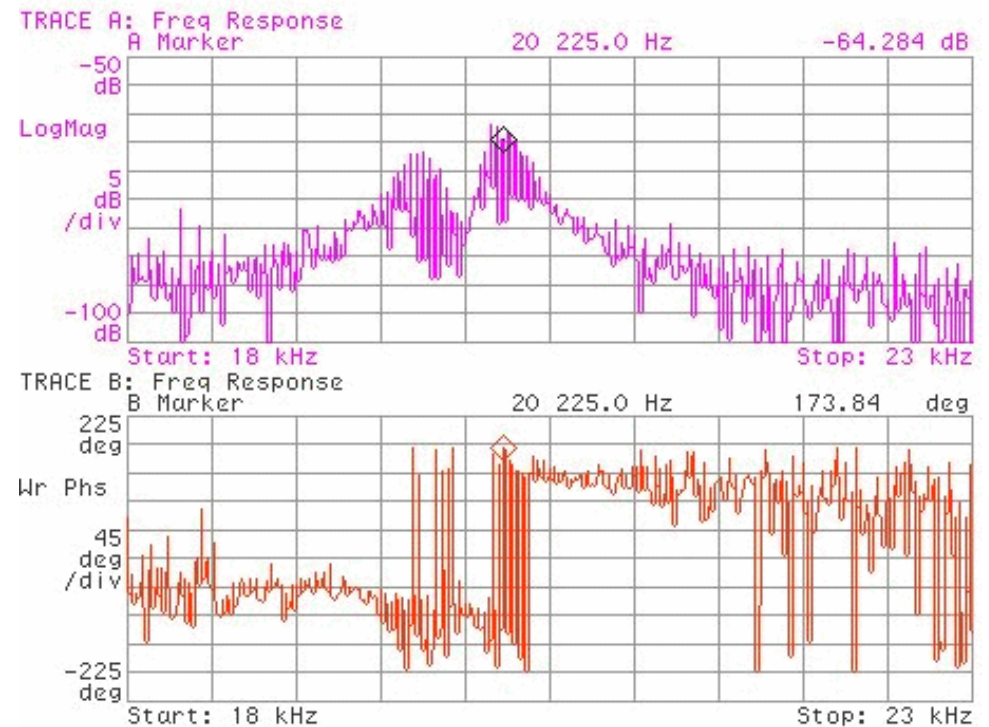
# Pbar Bunch 1 at low beta

Horizontal



Vertical

Date: 08-03-00 Time: 02:26 PM



# Tune Meter

## ■ Advantages

- ▶ Can measure individual bunches IF the bunch is far enough away from the protons.

## ■ Disadvantages

- ▶ Must tickle beam: pbar lifetime gets bad.
- ▶ A lot of gain needed, electronic coupling is always an issue.
- ▶ Requires expert babying.